a coating of a heat shrinkable material disposed over said distal tapered portion of said reinforcement tube.

- 16. (New) The composite guidewire of Claim 15, wherein said elongated, flexible core comprises a rod.
- 17. (New) The composite guidewire of Claim 15, wherein said elongated, flexible core comprises at least one strand.
- 18. (New) The composite guidewire of Claim 15, wherein said elongated, flexible core comprises a hypo tube.
- 19. (New) The composite guidewire of Claim 15, wherein said reinforcement tube comprises an elongated ground stainless steel hypo tube.
- 20. (New) The composite guidewire of Claim 15, wherein said reinforcement tube comprises titanium.
- 21. (New) The composite guidewire of Claim 15, wherein said reinforcement tube comprises a nickel titanium alloy.

- 22. (New) The composite guidewire of Claim 15, wherein said reinforcement tube comprises a distal tapered portion.
- 23. (New) The composite guidewire of Claim 15, wherein said coating of a heat shrinkable material comprises an elongated tube of polytetrafluoroethylene.
- 24. (New) The composite guidewire of Claim 15, wherein said primary coil comprises at least one nickel titanium alloy strand.
- 25. (New) The composite guidewire of Claim 15, wherein said primary coil comprises at least one platinum wire.
- 26. (New) The composite guidewire of Claim 24, wherein said primary coil further comprises at least one platinum wire.
- 27. (New) The composite guidewire of Claim 15, wherein said distal tip comprises platinum.
- 28. (New) The composite guidewire of Claim 15, wherein said distal tip comprises tantalum filled epoxy.

-4-